Operation

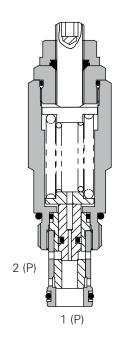
Pressure acts over one of two differential areas forcing the poppet back allowing relief flow to the other port.

This being a single cartridge is ideal for mounting on to a motor in a special housing.

Features

Single cartridge relieving in both directions cutting down space requirements, giving full adjustment through its range on both pressures at the same time.

Sectional view



Performance data

Ratings and specifications

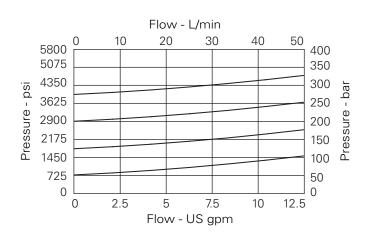
Figures based on: Oil Temp = 40° C Viscosity = 32 cSt (150 SUS)			
Rated flow	50 L/min (12 USgpm)		
Max pressure	250 bar (3500 psi)		
Cartridge material	Working parts hardened and ground steel.		
	External steel surfaces zinc plate.		
Body material	Standard aluminium (up to 210 bar*).		
	Add suffix "377" for steel option.		
Mounting position	Unrestricted		
Cavity number	C-10-2 (See Section M)		
Torque cartridge into cavity	60 Nm (44 lbs ft)		
Weight	1CLLR50 0.23 kg (0.5 lbs)		
	1CLLR55 0.8 kg (1.8 lbs))		
Seal kit number	SK614 (Nitrile)		
	SK614V (Viton®)		
Recommended filtration level	BS5540/4 Class 18/13 (25 micron nominal)		
Operating temp	-30° to +90°C (-22° to +194°F)		
Leakage	5 milliliters/min		
Nominal viscosity range	5 to 500 cSt		
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Viton is a registered trademark of E.I. DuPont

Description

This is a direct acting bi-directional relief valve designed to protect both lines in a circuit from over pressurization by relieving oil to the other line. Ideal for use with motors or directional valves as an emergency relief. Differential area, fast acting, poppet valve.

Pressure drop curves



Where measurements are critical request certified drawings. We reserve the right to change specifications without notice.

1CLLR50 - Dual relief valve

Poppet, direct acting, differential area 50 L/min (12 USgpm) • 250 bar (3500 psi)

Model code

1CLLR** - F 3W - 25 S

Function

1CLLR50 - Cartridge only **1CLLR55 -** Cartridge and body

2 Adjustment means

F - Screw adjustment

3	Port	sizes

Code	Port size	Housing number - body only	
		Aluminium Single	Steel Single
3W	3/8" BSP	B19053	
4W	1/2" BSP	B19356	B20601
8T	1/2" SAE	B19402	

4 Pressure range

Note: Code based on pressure in bar.

25 - 75-200 bar. Std setting 120 bar

5 Seals

S - Nitrile (For use with most industrial hydraulic oils)

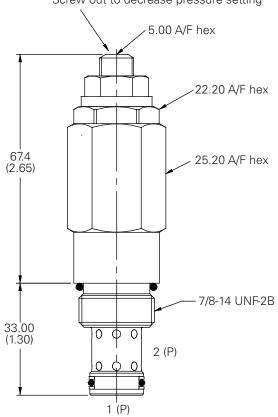
SV - Viton® (For high temperature and most special fluid applications)

Dimensions

mm (inch)

Cartridge only Basic code 1CLLR50

Screw in to increase pressure setting Screw out to decrease pressure setting



Complete valve

3/8", 1/2" Ports Basic Code 1CLLR55

